CLAIMS:

[C1] A section of a large diameter corrugated plastic pipe having transverse corrugations and an inner liner and a flange radially extending from the end section of the pipe.

[C2] The pipe section of claim 1 in which the flange is formed by a circumferential portion of a corrugation.

[C3] The pipe section of claim 1 in which the flange is formed by a circumferential portion of the liner.

[C4] The pipe section of claim 1 in which the flange is formed by a circumferential portion of the pipe liner and corrugation.

[C5] Two abutting sections of large diameter corrugated plastic pipe each having transverse corrugations and an inner liner and a flange at abutting ends joined in an assembly having a clamp encompassing the abutting flanges forming a joint.

[C6] Two sections of large diameter corrugated plastic pipe each having transverse corrugations and an inner liner and a flange at the end of each pipe section joined in an assembly in which a gasket is interposed between the flanged ends of the pipe and a peripheral clamp encompasses the abutting flanges.

[C7] The pipe section of claim 6 in which the gasket has a flat shape in a correspondence with the cross section of the pipe sections.

[C8] The pipe section of claim 6 in which the gasket has a wedge shaped cross section in a correspondence with the cross section of the pipe sections.

[C9] The pipe section of claim 6 in which the gasket comprises an "O" ring shape in transverse cross section.

[C10] The assembly of claim 5 or claim 6 in which the peripheral flange clamp includes a groove that straddles the flanges and provides a compressive force.

[C11] The assembly of claim 5 or claim 6 in which the peripheral flange clamp includes facing sections at the opposite sides of the flanges on the pipes to be joined and the clamps provides a compressive force between the flange surfaces in the longitudinal direction of the pipe axis

[C12] The assembly of claim 10 in which the flange clamp is an inverted "V" retaining coupling.

[C13] The assembly of claim 10 in which the flange clamp is an inverted wedge.

[C14] The assembly of claim 10 in which the flange clamp comprises a multiplicity of peripheral sections.

[C15] The assembly of claim 10 in which the flange clamp extends peripherally about the flange ends in a single length essentially in correspondence with the nominal pipe size.

[C16] A section of large diameter corrugated plastic pipe having transverse corrugations and an inner liner and a flange at an end joined to one of the group of plastic pipes; non-plastic pipes; plastic fittings; and non-plastic fittings having a flange end at the location of a joint.

[C17] The method of forming a flange at the end of a corrugated plastic pipe section having transverse corrugations comprising forming a circumferential portion integrally and radially extending from the end of the pipe from at least one of the end corrugation at the pipe end and the liner of the pipe at the end of the pipe section.

[C18] The method of joining a section of corrugated pipe plastic having a flange at its end forming a first member abutting a second member being a section of a corrugated pipe, a non-plastic pipe or a fitting having a flange at its end comprising aligning the first and second members in a co-linear relationship in which the end flanges of the members are in an approximately abutting relationship, and applying a

flange clamp circumferentially straddling the flanges to provide a force on the exterior surface of the flanges to draw the flanges together.

[C19] The method of claim 18 including inserting a gasket between the flanges and compressing the gasket with a force applied by the clamp.

[C20] Two sections of large diameter corrugated plastic pipe each having transverse corrugations and an inner liner and a flange at the end of each pipe section joined in a clamped assembly including an outer gasket encompassing the radially peripheral ends of the flange.

[C21] The assembly of claim 20 in which a clamp exerts a force to compress the gasket between the inner surface of clamp interior and the outer radial edge of the flanges.

[C22] A kit for providing a joint between adjacent sections of corrugated plastic pipe or a section of corrugated plastic pipe having essentially similar cross-sections and a pipe or fitting having a flanged end, the kit including a peripheral flange clamp having a cross sectional shape such that the clamp is capable of straddling the flanges at the end sections to be joined.

[C23] The kid of claim 22 including a gasket having a cross-sectional shape in a correspondence with the flanges at the sections to be joined.

[C24] The kit of claim 22 including a portable cutting device and a guide fixture for making field cuts in the end section of the corrugated pipe to provide a flange at the end thereof by forming a radially extending circumferential portion of at least one of a section of a corrugation or the liner of the corrugated pipe.

[C25] The method of forming a flange at the end of a section of corrugated plastic pipe by transversely severing from the pipe a section of a corrugation of the pipe at an axial location on the corrugation at the end of a pipe section.

[C26] A fitting having at least two flanges in which one of the fitting ends has an off set, selectable diameter flange reducer coupling capable of being cut off at a predetermined flange diameter.

[C27] The fitting of claim 26 wherein the fitting comprises a molded plastic composition.

[C28] The fitting of claim 27 wherein the fitting is one of an in-line, "Y", "T", 4 way, elbow or angle.

[C29] The assembly of claim 5 or claim 6 including a toggle clamp.